



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,645	09/29/2000	Makoto Yamada	450100-02736	3220
20999 7590 01/05/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER NGUYEN, HUY THANH	
			ART UNIT	PAPER NUMBER
			2621	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/676,645

Applicant(s)

YAMADA ET AL.

Examiner

HUY T. NGUYEN

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

HUY T. NGUYEN  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/25/06.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 September 2006 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The original specification does not provide support to "the second data unit being a set of the first data unit and the "second data unit is adjacent to the first data unit" that is being recited in claims 1,2,3 and 9-14.

Art Unit: 2621

3. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitations "the second data unit being a set of the first data unit and "the second data unit is adjacent to the first data unit" in claims 1,2,3 and 9-14 are indefinite. Therefore, it is not unclear whether the second data unit is a set of the first data unit, or separate and different from the first data unit.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-5, 7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al (6,263,152) in view of Inai (6,055,565) and Yonemitsu et al (EP 0858171 A2) .

Regarding claim 1, Hisatomi discloses a recording apparatus (Fig. 15) for recording video data and audio data to a writable optical disc (DVD-RAM), comprising:

encoding means (53) for encoding video data corresponding to a compression-encoding process (column 12, lines 30-51, column 15, lines 35-52);

converting means for converting the data structure of the encoded video data received from said encoding means into a file structure that allows a moving picture to be synchronously reproduced (Fig. 24, column 16, lines 19-38) ;

recording means for recording data having the file structure to an optical disc, wherein the file structure has a first data unit (sector or pack) and a second data unit (object unit), the second data unit being a set of the first data units (Fig.13) , and wherein a plurality of the second data units is matched with a successive record length ( object unit length, Fig. 24) which data is written to the optical disc; and

reproducing means for synchronously reproducing the audio data and moving picture (column 16, lines 19-38).

Hisatomi fails to specifically teach that the moving picture and/or audio signal are synchronously reproduced by a computer software without need to use especially dedicated hardware. Inai teaches using a computer software to synchronously reproduced the moving picture and audio without need to use specially dedicated hardware (column 10, lines 3-40, column 11, lines 1-20). Therefore it would have

Art Unit: 2621

been obvious to one of ordinary skill in the art to modify Hisatomi with Inai by using computer software as taught by Inai with the optical disc of Hisatomi to synchronously reproducing the moving or audio data the enhancing data structure file use with a computer that do not have specifically dedicated decoding hardware .

Hisatomi as modified with Inai fails to specifically teach that the encoding rate is lower than a transfer rate when the data is read.

Yonemitsu teaches a recording apparatus in which having a rate control means for intermittently read the data and the data having rate higher than encoding rate in order to improve the quality of the data due to condition of the apparatus (page 4, lines 50-55) . I would have been obvious to one of ordinary skill in the art to modify Hisatomi as modified with Inai with Yonemitsu by using a rate control means with the apparatus of Hisatomi as modified with Inai for controlling the rate of the read data thereby improving the quality of the data .

Further for claim 2, Hisatomi further teaches converting the audio data into the file structure (column 12, lines 40-41).

Further for claim 3, Hisatomi further teaches the video encoding means for encoding video data corresponding to a compression-encoding process in a combination of an inter-frame predictive encoding process and a motion compensating process that allow a plurality of frames are structured as a group (MPEG encoding, (column 12, lines 30-51, column 15, lines 35-52);

audio output means (54) for outputting audio data that has been compression-encoded or non-compressed (column 12, lines 40-51);

multiplexing means (56) for converting the data structure of the encoded video data received from said encoding means and the data structure of the audio data received from said audio output means into respective file structures (Fig. 24 , column 13, lines 1-3, lines 30-58) that allow a moving picture to be synchronously reproduced .

Regarding claim 4, Hisatomi further teaches that in the multiplexed data, the duration of the encoded video data of the second data unit is almost equal to the duration of the audio data of the second data unit since the video pack has equal bytes with the audio pack (column 13, lines 44-50).

Regarding claim 5, Hisatomi further teaches that wherein in the multiplexed data, the encoded video data of the second data unit and audio data of the second data unit are alternately arranged, and wherein a plurality of sets of the encoded video data of the second data unit and the audio data of the second data unit are matched with the successive record length since each object unit comprise a plurality of video sets and audio sets (Figs. 5, 24) .

Method claims 9-11 corresponds to apparatus claims 1-3, therefore method claims 9-11 are rejected by the same reason as applied to apparatus claims 1-3.

Further for claims 12-14, Hisatomi as modified with Inai further a medium having a program read by a computer for performing the steps being recited in claims 12-14 correspond to apparatus claims 1-3 since Hisatomi teaches using a program used with a computer or processor to perform the steps of encoding, formatting and recording the moving picture and /or audio data (Figs. 17 and 19) and Inai teaches

using a computer software for synchronously reproducing the moving picture and audio data (column 10, line 30 to column 11, line 20).

Regarding claims 7 and 16, Hisatomi further teaches that the file structure further includes a data portion that describes management information, and wherein the data portion describes the number of the second data units (object number ) contained in the successive record length (Figs. 25,28 and 29).

6. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al (6,263,152) in view of Inai (6,055,565) and Yonemitsu et al (EP 0858171 A2) as applied to claim 1 above , further in view of Kanota et al (6,813,681).

Regarding claims 6 and 15, Hisatomi as modified with Inai fails to teach that the audio the audio data is compression-encoded corresponding to ATRAC, and wherein the first data unit of the file structure contains one or a plurality of sound units. Kanota teaches means for compression –encoded audio data to ATRAC units (column 11, lines 47-53). It would have been obvious to one of ordinary skill in the art to modify Hisatomi with Kanota by using a ATRAC audio compressing mean as taught by Kanota with the apparatus of Hisatomi as an alternative to the encoding means of Hisatomi for compression -encoding the audio data .

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al (6,263,152) in view of Inai (6,055,565) and Yonemitsu et al (EP 0858171 A2) as applied to claim 1 above , further in view of Kikuchi et al (6,570,837).



Regarding claim 8, Hisatomi further teaches that the file structure further includes a data portion that describes management information and the data portion describes a flag and the number of sets contained in the successive record length (Figs. 13, 25, 28) but fails to specifically teach that the flag representing whether or not sets of encoded video data and audio data of the second data unit have been recorded in the data portion.

Kikuchi teaches using flags in a management for indicating whether or not a set of information is recorded on a medium (fig. 7, column 9, lines 55-65). Therefore, it would have been obvious to one of ordinary skill in the art to modify Hisatomi as modified with Inai with Kikuchi by using flags with the data portion to indicate whether or not the video or audio units are recorded in the portion of a medium in order to accurately accessing the video or audio data.

### ***Response to Arguments***

8. Applicant's arguments that Hisatomi does not teach that the successive record length is a length of data that can be written without a jumping operation. In response, it is noted that Hisatomi at figure 24 discloses video object units can be written on a medium without jump operation.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.N

  
HUY NGUYEN  
PRIMARY EXAMINER